Michigan Department of Environment, Great Lakes, and Energy Huron River Watershed Regan Drain Sampling Update December 2020

EGLE's Water Resources Division Surface Water Assessment Section and Southeast District staff collected additional surface water samples for PFAS analysis from the Regan Drain on November 25, 2020. These samples were collected to confirm the elevated PFOS concentrations in the Regan Drain near Burrelle Avenue observed during the October 2020 sampling and to investigate storm water outfalls that are present in this section of the stream. Table 1 lists sampling location details and corresponding PFOS and PFOA concentrations for samples (parts per trillion (ppt)).

PFOA concentrations did not exceed the Rule 57 Human Noncancer Value (HNV) of 12,000 ppt at any location (Figure 1). Four of the six sampling locations had a detectable PFOS concentration below the reporting limit (Figure 1). PFOS concentrations were below the reporting limit at the furthest upstream sample collected at S. Huron Rd. (RG01000). PFOS exceeded the HNV of 12 ppt at two sampling locations:

- 1. Regan Drain, main branch near Brose New Boston storm water discharge (RG004 and RG004-FR): 53.5 and 54.3 ppt
- 2. Regan Drain, main branch near a storm water discharge point, downstream of Brose New Boston (RG003): 39.3 ppt

The surface water exceedances observed in the Regan Drain were downstream of the New Brose Boston storm water outfall. EGLE will be following up with the facility to determine if they are a source of PFAS to this watershed.

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Table 1: PFOS and PFOA concentrations (in ppt (parts per trillion)) in surface water samples collected on November 25th, 2020 from the Regan Drain watershed. PFOS results that exceeded the Rule 57 Human Noncancer Value (HNV) of 12 ppt are bolded and italicized. The HNV for PFOA is 12,000 ppt.

Sample ID**	Water Body	Location Description	Latitude	Longitude	PFOS (ppt)*	PFOA (ppt)
RG1000	Regan Drain	Regan Drain at S Huron Rd, u/s sample	42.137293	-83.388862	2.72 J	1.96
RG0506	Ditch along Bell Rd	Ditch along Bell Road where it diverges from Regan Drain	42.133117	-83.382911	3.51 ^J	ND
RG0505	Regan Drain	Regan Drain, main branch, near Brose New Boston storm water discharge	42.132022	-83.382772	53.5	5.72
RG0505-FR	Regan Drain	Regan Drain, main branch, near Brose New Boston storm water discharge	42.132022	-83.382773	54.3	5.25
RG0501	Regan Drain	Regan Drain, main branch, near a storm water discharge point (downstream of Brose New Boston)	42.130658	-83.3827	39.3	4.64
RGW0020	West Branch, Regan Drain	Regan Drain, west branch, north side of Burelle Ave. Near Plastic Omnium storm water discharge.	42.129356	-83.369183	8.55	2.85
RGW0010	West Branch, Regan Drain	Regan Drain, west branch, south side of Burelle Ave. Swift Transportation storm water discharge.	42.12968	-83.38324	2.33 ^J	ND

^{*}J: Sample concentration was less than the analytical reporting limit

^{**}FR: Field replicate



Figure 1. Surface water samples collected from the Regan Drain watershed on November 25th, 2020. PFOS and PFOA concentrations are displayed in parts per trillion (ppt).